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University of California
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BARLEY STATISTICS
WITH
SPECIAL REFERENCE TO CALIFORNIA

by
John B. Schneider and Dallas W. Smythe

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BARLEY STATISTICS WITH SPECIAL REFERENCE TO CALIFORNIA ^{1/}

John B. Schneider^{2/} and Dallas W. Smythe^{3/}

The following tables are organized to show:

- I. The Production of Barley
- II. The Disposition of the California Barley Supply
- III. The Export Market for California Barley
- IV. The Domestic Malting Market for California Barley
- V. The Domestic Feed Market for California Barley

Section I.-- Three tables give statistics concerning the production of barley. Table 1 shows production in each of the ten leading producing nations and the world total. The relation of California production to that of the United States together with acreage and yield per acre are shown in table 2. Table 3 reveals the shifting relative importance of the seven principal barley-producing states.

Section II.-- California production, carryover, exports, domestic supply and consumption are shown in table 4. Table 5 indicates the disposition of the California barley supply as between exports, California malting use and feed requirements.

Section III.-- This section deals with the export market for California barley, analyzing first the exports from California by countries of destination (table 6). Since the United Kingdom is the principal export market for California barley, the remainder of the tables in this section cover different aspects of that market. Table 7 shows barley production and imports for the United Kingdom. Imports are indicated by countries of origin in table 8. The estimated requirements for the various uses of barley in the United Kingdom appear in table 9. The trend in beer production in the United Kingdom is presented in table 10. A comparison of malting barley prices in Chicago, San Francisco, Hull and London appears in table 11.

Section IV.-- The domestic malting market for California barley is dealt with in three tables: table 12, the United States consumption of barley malt and the percentage supplied by imports; table 13, United States production of beer, barley malt used for beer, distilled spirits and alcohol; table 14, production and sales of beer by California breweries since April, 1933 (the month in which the unlimited production and sale of beer of 3.2 per cent alcoholic content by weight was legalized).

Section V.-- The domestic feed market for California barley is analyzed with reference to several factors. Table 15 indicates the changing livestock population in California. Egg shipments from California and hatchery sales in California are shown to indicate the possible trend in chicken population. Various commodities compete with barley for use as feed. Annual average wholesale prices for feed barley, feed wheat, feed concentrates, No. 2 yellow corn, and sacked milo appear in table 16. Table 17 and figure 1 show the relation between feed barley prices and the prices of these competing commodities.

^{1/}Mimeographed Report No. 36.

^{2/}Associate on the Giannini Foundation and Associate in the Experiment Station.

^{3/}Extension Specialist in Agricultural Economics and Associate on the Giannini Foundation.

TABLE 1

Barley: World Production, Annual, 1926-1933, and Averages 1926-1929, 1930-1933

Country	1926	1927	1928	1929	1930	1931	1932	1933*	Average		Average	
	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1926-1929	Per cent	1930-1933	Per cent
Russia	5,905	4,873	6,241	7,945	7,465	5,401	5,545	8,641	6,241	14.2	6,763	15.0
United States	3,937	5,761	7,921	6,721	7,297	4,777	7,249	3,745	6,085	13.8	5,767	12.8
Germany	2,712	3,025	3,697	3,505	3,145	3,337	3,553	3,817	3,235	7.3	3,463	7.7
India	2,905	2,856	2,352	2,833	2,568	2,688	2,664	-- [†]	2,736	6.2	2,640 [†]	5.8
Rumania	1,848	1,392	1,656	3,025	2,616	1,560	1,608	2,064	1,980	4.5	1,962	4.3
Canada	2,400	2,328	3,265	2,448	3,241	1,608	1,944	1,512	2,610	5.9	2,076	4.6
North Africa [§]	1,632	1,896	2,400	2,352	1,944	2,256	2,256	2,088	2,070	4.7	2,136	4.7
United Kingdom	1,152	1,056	1,272	1,248	912	936	936	768	1,182	2.7	888	2.0
Chile	120	144	144	120	96	72	-- [†]	-- [†]	132	0.3	84 [¶]	0.2
Australia	168	120	168	192	168	168	-- [†]	-- [†]	162	0.4	168 [¶]	0.4
Other countries	17,571	16,395	17,211	19,323	18,291	17,859	19,539	20,955	17,625	40.0	19,161	42.5
Estimated world total excluding China	40,350	39,846	46,327	45,712	47,743	40,662	45,294	43,590	44,059	100.0	45,108	100.0
Estimated world total excluding Russia and China	34,445	39,973	40,086	41,767	40,278	35,261	39,749 [†]	34,949 [†]	37,818	85.8	38,345	85.0

* Preliminary.

[†] Data for Chile and Australia in 1932 and for India, Chile and Australia in 1933 are not available.[‡] Three-year average.[§] Morocco, Algeria, and Tunis.[¶] Two-year average.Source of data: U. S. Dept. Agr. Bur. Agr. Econ. Foreign Crops and Markets, March 5, 1934. p. 254-5.
Bushels converted to tons at 41.66 bushels per ton.



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TABLE 2

Barley: Acreage, Yield and Production
California and United States, 1921-1933

Year harvested	California				United States			
	Acreage harvested	Yield per acre	Production	California production as percent- age of col. 7	Acreage harvested	Yield per acre	Production	Col. 7 as percentage of world production*
	1	2	3	4	5	6	7	8
	1,000 acres	100 pounds	1,000 tons	per cent	1,000 acres	100 pounds	1,000 tons	per cent
1921	1,188	12.0	713	22.7	7,073	8.9	3,138	9.8
1922	1,129	14.6	826	22.4	6,599	11.2	3,691	10.6
1923	1,095	14.5	794	20.8	7,150	10.7	3,816	10.1
1924	765	10.5	402	10.1	6,910	11.5	3,980	11.2
1925	1,050	14.9	781	16.9	8,076	11.5	4,625	11.1
1926	1,080	14.4	778	19.8	7,840	10.0	3,930	9.7
1927	994	13.2	656	11.3	9,419	12.3	5,785	14.5
1928	1,044	14.6	764	9.6	12,710	12.5	7,949	17.2
1929	1,066	14.2	699	10.4	13,523	9.9	6,727	13.5
1930	1,094	16.8	788	10.8	12,660	11.6	7,312	15.3
1931	820	8.1	330	6.9	11,424	8.4	4,766	11.7
1932	1,246	15.1	942	13.0	13,346	10.8	7,250	16.0
1933	934	12.6	587	15.7	10,052	7.4	3,747	8.6
Average 1921-1929	1,046	13.6	713	14.7	8,811	11.0	4,849	12.2
Average 1930-1933	1,024	12.9	662	11.5	1,187	9.7	5,769	12.8

Busbels converted to tons at 41.66 bushels per ton.

* World production, including Russia, excluding China, from table 1.

Sources of data: University of California, Agricultural Extension Service. Outlook charts and tables. Annual issues. Original source:

Cols. 1, 2, and 3: California Cooperative Crop Reporting Service.

Cols. 5, 6, and 7: 1921-1930: United States Dept. Agr. Yearbook, 1932. p. 630.

1931-1933: United States Dept. Agr. Fur. Agr. Econ. Crops and Markets.

TABLE 3
Barley Production in the Seven Principal Barley-Producing States in the United States
1921-1933
(Thousands of tons*, i.e. 000 omitted)

Year	California	North Dakota	South Dakota	Minnesota	Wisconsin	Iowa	Nebraska	Others	Total United States
1921	712.9	407.8	457.0	448.9	255.4	76.7	118.0	1,242.6	3,719.3
1922	826.5	617.0	486.4	577.6	341.3	110.5	104.6	1,306.4	4,370.3
1923	793.8	525.1	480.7	577.3	318.1	108.1	227.8	1,714.4	4,745.3
1924	402.2	916.2	512.0	702.8	300.3	101.2	150.6	1,273.2	4,358.5
1925	781.3	935.4	571.1	790.7	407.2	131.5	135.9	1,380.4	5,133.5
1926	777.7	505.3	188.6	784.3	431.4	196.2	112.8	1,442.1	4,438.4
1927	656.1	1,017.9	864.1	1,051.4	513.4	342.2	181.9	1,755.2	6,382.2
1928	651.3	1,344.3	864.5	1,387.2	574.3	635.3	299.3	2,192.6	7,948.8
1929	698.6	931.6	859.6	1,290.4	489.4	476.8	373.3	1,607.2	6,726.9
1930	787.8	1,056.1	1,025.4	1,292.3	573.7	388.0	453.1	1,735.2	7,311.6
1931	330.6	443.6	400.4	899.7	456.2	325.2	324.8	1,585.3	4,765.8
1932	942.1	969.6	1,143.3	1,133.7	568.2	362.5	440.7	1,690.1	7,250.2
1933	587.4	439.3	82.8	688.3	425.1	204.3	201.4	1,118.5	3,747.1
Average 1921-1929	700.0	800.1	587.1	845.6	403.4	242.1	189.4	1,546.0	5,313.7
Average 1930-1933	662.0	727.2	663.0	1,003.5	505.8	320.0	355.0	1,532.2	5,768.7

* Converted from bushels at 41.66 bushels = 1 ton.

Sources of data:

1921-1930: U. S. Department of Agriculture Yearbook of Agriculture, annual issues.

1931-1933: Federal-State Market News Service: Annual Barley Market Review, June 26, 1934. San Francisco.

TABLE 4

5.

Barley: California Production, Carryover, Exports,
Domestic Supply and Consumption, 1921-22 to 1933-34
(Thousands of tons, i.e. 000 omitted)

Crop year July-June	Production	Carryover	Production plus carryover	Exports	Supply for domestic consumption	Domestic consumption
	1	2	3	4	5	6
1921-22	713	121	834	423	411	364
1922-23	826	47	873	377	496	458
1923-24	794	38	832	248	584	527
1924-25	402	57	457	209	250	216
1925-26	781	32	813	314	499	369
1926-27	778	130	908	285	623	579
1927-28	656	44	700	200	500	476
1928-29	764	24	788	251	537	467
1929-30	699	70	769	262	507	423
1930-31	788	84	872	240	632	495
1931-32	330	137	467	106	361	298
1932-33	942	63	1,005	199	806	559
1933-34	587	247	834	135*	699	514
1934-35	575 [†]	185	760	--	--	--
Average 1921-1929	714	62	776	288	488	432
Average 1930-1934	644	143	787	170 [‡]	625 [‡]	466 [‡]

Ton = 41.66 bushels.

* July to May plus average June exports, 1926-1933, 15,000 tons.

[†] Federal-State Market News Service, "Barley Market Review" June 22, 1934.
San Francisco. Estimated as between 550 and 600.

[‡] Four years.

Sources of data:

Col. 1: University of California, Agricultural Extension Service, Outlook charts and tables. Annual issues. Original source: California Cooperative Crop Reporting Service.

Col. 2: Grain Trade Association, San Francisco Chamber of Commerce.

Col. 3: Col. 1 plus col. 2.

Col. 4: 1921-22 to May, 1933: Bur. of For. and Dom. Com., San Francisco.
1933-34: Federal-State Market News Service, San Francisco.

Barley Market Review.

Col. 5: Col. 3 minus col. 4.

Col. 6: Col. 5 minus carryover (col. 2) to the next crop year.

TABLE 5

6.

Disposition of California Barley, Averages, 1927-28
to 1929-30, 1930-31 to 1933-34; and 1933-34

	Average 1927-28 to 1929-30		Average 1930-31 to 1933-34		1933-34	
	1	2	3	4	5	6
	<u>1,000 tons</u>	<u>per cent</u>	<u>1,000 tons</u>	<u>per cent</u>	<u>1,000 tons</u>	<u>per cent</u>
<u>Supply:</u>						
1. Production	708.0	98.0	661.8	104.2	587.3	85.0
2. Imports	12.2	2.0				
3. Carryover			27.1*	4.2*	100.4	15.0
Total supply used	720.2	100.0	634.7	100.0	687.7	100.0
<u>Disposition:</u>						
4. Exported	237.0	33.0	183.3†	29.0	198.6†	29.0
5. California malting use			16.1	3.0	30.9	4.0
6. Used for seed	45.0	6.0	46.8	7.0	48.3	7.0
7. Feed - local disappearance	438.2	61.0	388.5	61.0	409.9	60.0
Total supply used	720.2	100.0	634.7	100.0	687.7	100.0

* Excess of outgoing over incoming carryover.

† Includes "Shipments to Eastern States, 1933-34" amounting to 44,000 tons.

Sources of data:

Cols. 1 and 2: Braun, E. W. Barley. Series on California Crops and Prices. California Agr. Exp. Sta. Bul. 512. p. 8. 1931.

Cols. 3, 4, 5, and 6: Federal-State Market News Service: Annual Barley Market Review, San Francisco, June 26, 1934. Compiled from official data except where otherwise noted.

TABLE 6

7.

Barley: Exports from California* by Countries of Destination

1921-22 to 1932-33

(Tons of 2,000 pounds)[†]

Crop year (July-June)	United Kingdom	Belgium	Other European	All other countries	Total
1921-22	334,628	25,549	51,515	11,598	423,290
1922-23	285,224	25,768	57,168	8,725	376,885
1923-24	233,877	3,696	9,417	587	247,577
1924-25	161,679	15,509	24,218	7,152	208,558
1925-26	256,590	22,559	25,324	9,127	313,600
1926-27	223,771	19,278	34,488	7,455	284,992
1927-28	177,999	3,627	17,321	1,140	200,087
1928-29	238,849	6,004	5,468	495	250,816
1929-30	231,775	14,435	5,930	9,372	261,512
1930-31	208,120	18,595	12,888	242	239,845
1931-32	101,613	2,911	998	302	105,824
1932-33	157,190	39,952	2,021	6	199,169
1933-34	-- ‡	-- ‡	-- ‡	-- ‡	135,720 [§]
Average 1921-22 to 1929-30	238,266	15,158	25,650	6,183	285,257
Average 1930-31 to 1932-33	155,641	20,486	5,303	183	181,613 [¶]

* Exports from San Francisco Customs District. Shipments from San Diego and Los Angeles are very small.

[†] Bushels converted to tons; 41.66 bushels = 1 ton.

[‡] Figures not reported by destination.

[§] July-May plus 15,000 tons for June (an eight-year average 1926-27 to 1932-33).

[¶] Four-year average.

Source of data: Bur. of Foreign and Domestic Commerce, San Francisco.

TABLE 7

United Kingdom: Barley Production and Imports, 1921-22 to 1933-34

Year	Production*	Imports (July-June)	Production plus imports
	<u>1</u> <u>1,000 tons</u>	<u>2</u> <u>1,000 tons</u>	<u>3</u> <u>1,000 tons</u>
Average 1921-22 to 1925-26	1,257	928	2,185
1926-27	1,152	712	1,864
1927-28	1,056	796	1,852
1928-29	1,272	756	2,028
1929-30	1,248	716	1,964
1930-31	912	916	1,828
1931-32	936	743	1,679
1932-33	936	646	1,582
1933-34	768	902 [†]	1,670
Average 1921-1929	1,224	846	2,070
Average 1930-1933	888	802	1,690

* Production refers to the year of harvest. Converted at 41.66 bushels per ton.

[†] July, 1933, to May, 1934.

Sources of data:

Col. 1: Average 1921-22 to 1925-26: U. S. Department of Agriculture Yearbook of Agriculture. 1933. pp. 452-453.

1926-27 to 1933-34: U. S. Department of Agriculture Bureau of Agricultural Economics, Foreign Crops and Markets. March 5, 1934. pp. 254-255.

Col. 2: 1921-22 to 1926-27: U. S. Department of Agriculture Bureau of Agricultural Economics, Foreign Crops and Markets. October 10, 1927. pp. 518-520.

1927-28 to January, 1934: International Institute of Agriculture. International Review of Agriculture. Monthly Crop Report and Agricultural Statistics.

1934: Accounts Relating to the Trade and Navigation of the United Kingdom. H.M.S.O. London. Monthly issues.

TABLE 8
Barley Imports into United Kingdom by Countries of Origin, Averages 1910-1914,
1925-1929, 1930-1933; Annual, 1930-1933; January-April, 1933 and 1934

Country of origin	Calendar Years																	
	Average 1910-1914		Average 1925-1929		1930		1931		1932		1933		Average 1930-1933		Jan.-May 1933		Jan.-May 1934	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	1000 tons*	per cent	1000 tons*	per cent	1000 tons*	per cent	1000 tons*	per cent	1000 tons*	per cent	1000 tons*	per cent	1000 tons*	per cent	1000 tons*	per cent	1000 tons*	per cent
Russia	348	31	82	11	330	39	314	36	153	27	219	24	254	32	36	14	44	12
United States†	179	16	267	35	203	24	182	21	89	16	156	17	157	20	75	29	61	17
British India	146	13	17	2	1	0	8	1	6	1	--†	--†	4	--†	--†	--†	--†	--†
Rumania	120	11	39	5	124	15	58	7	30	5	175	20	97	12	16	6	43	12
Western Asia	110	10	79	10	54	6	139	16	91	16	--†	--†	71	9	--†	--†	--†	--†
Canada†	59	5	104	14	19	2	57	7	137	24	46	5	64	8	25	10	12	3
North Africa	49	4	43	6	9	1	8	1	1	0	--†	--†	5	1	--†	--†	--†	--†
Germany	28	2	1	0	4	0	1	0	1	0	--†	--†	2	0	--†	--†	--†	--†
Chile	22	2	40	5	32	4	14	1	15	3	29	3	22	3	2	1	17	5
Australia	1	0	12	1	4	0	18	2	18	3	33	4	18	2	18	7	23	6
Other countries	74	6	86	11	72	9	65	8	29	5	237	27	101	13	85	33	161	45
Total	1,136	100	770	100	852	100	864	100	570	100	895	100	795	100	257	100	361	100

* Tons of 2,000 pounds, computed from British hundredweights of 112 pounds.

† While the sum of the imports from Canada and the United States stated in this table is possibly correct, the division between those from the two countries is probably incorrect. Confusion arises from exports to Europe of (1) Canadian barley through United States; (2) United States barley through Canada. The true destination of such shipments is obscured by the method of reporting. According to H. C. Grant, "Barley Survey" p. 34-9 (1933), the statistics given overestimate United States and underestimate Canadian exports. He discusses this problem and estimates the real movement of Canadian and United States barley to the United Kingdom and Germany for the years 1923 to 1928.

‡ Included in "other countries."

§ Turkey (Asiatic and European), Iraq and Persia.
¶ Algeria, Tunis and Morocco.

Sources of data:

1910-1932: Great Britain Customs and Excise Department, Statistical Office. Annual statement of the trade of the United Kingdom with foreign countries and with British countries. Vol. II, Annual issues.
1933-1934: Accounts relating to the trade and navigation of the United Kingdom, monthly issues.

TABLE 9
Estimated Requirements for the Various Uses
of Barley in the United Kingdom, 1928

Kinds of barley	Thousands of bushels
Home-grown malting barley	22,000
Imported malting barley	10,000
Malt products industry	1,500
Pot and pearl barley	500
Distilling	4,500
Home-grown, used on farms	16,500
Home-grown, sold for feed	9,000
Imported feeding barley	13,000
Total utilization	77,000

Source of data: Grant, H. C. Barley survey: A study of barley production, exports, imports, marketing, markets and prices in the principal exporting and importing countries in the world. p. 66. London, H.M.S.O., March, 1933.

TABLE 10

11.

Beer Production and Use of Barley for that Purpose
in the United Kingdom, 1923-24 to 1932-33

Year (April-March)	Beer production bulk barrels*	Average gravity†	Barley used in beer production‡	California exports to United Kingdom as percentage of col. 3
	1	2	3	4
	<u>millions</u>	<u>degrees</u>	<u>tons</u>	<u>per cent</u>
1923-24	25.4	1,043.04	848,235	27.6
1924-25	26.7	1,043.12	890,271	18.2
1925-26	26.8	1,043.23	904,375	28.4
1926-27	25.1	1,043.28	864,467	25.9
1927-28	25.4	1,043.31	843,473	21.1
1928-29	24.5	1,043.21	831,125	28.7
1929-30	25.0	1,043.05	818,807	28.3
1930-31	23.8	1,042.69	795,926	26.1
1931-32	20.7	1,041.19	720,055	14.1
1932-33	17.8	1,039.69	561,819	28.0
Average 1923-24 to 1929-30	25.6	1,043.18	857,250	25.4
Average 1930-31 to 1932-33	20.8	1,041.19	692,600	22.5

* Bulk barrel = 36 gallons at gravity at which actually brewed.

† "To produce a beer of lower specific gravity a larger percentage of imported, sun-ripened, six-rowed barley must be used. As a consequence, while the reduced consumption of beer has decreased the absolute quantity of malting barley demanded, the relative quantity of imported malting barley has increased." Grant, H. C. Barley..... p. 54. 1933.

‡ Original statistics in terms of malt; figures converted from malt to barley at 141 pounds barley = 100 pounds malt; based on data in U. S. Tariff Commission. Barley Malt. Report No. 59, Second Series. p. 19.

§ Based on data in table 6. Practically all California barley shipped to United Kingdom is used in beer production.

Source of data: Twenty-fourth Report of Customs and Excise, United Kingdom. p. 50. 1933.

TABLE 11

12.

Annual Average Prices of Malting Barley, Chicago; California
Shipping Barley, San Francisco; California Superior Malting
Barley, London; and English Malting Barley
1921-22 to 1933-34

(Dollars per hundredweight)*

Crop year	Malting barley wholesale price, Chicago August-July	California shipping barley, San Francisco June-May	California superior malting barley, London July-June	English malting barley† September-April
	1	2	3	4
1921-22	1.27	1.40	2.15	2.34
1922-23	1.35	1.51	2.18	1.89
1923-24	1.50	1.59	2.20	2.02
1924-25	1.88	2.37	3.20	2.85
1925-26	1.50	1.60	2.32	2.13
1926-27	1.60	1.52	2.34	2.30
1927-28	1.90	2.38	3.06	2.42
1928-29	1.25	1.76	2.62	2.20
1929-30	1.29	1.57	2.13	1.82
1930-31	1.13	1.25	1.55	1.87
1931-32	1.00	1.27	1.50	1.64
1932-33	0.81	0.73	0.88	1.38
1933-34	1.42‡	0.99	1.19§	2.19

* Columns 1 and 2 converted from bushels of 48 pounds; columns 3 and 4 from quarters of 448 pounds.

† Quotations at Hull 1921-22 to 1929-30 and London 1930-31 to 1933-34.

‡ Nine-month average.

§ Eleven-month average.

Sources of data:

Col. 1: U. S. Tariff Commission. Barley malt. Report 59, Second series. p. 13. 1933. (Compiled from Bureau of Labor Statistics, Wholesale Price Bulletin, since April, 1932. Beginning April, 1933, the monthly average prices increased from 92 cents to \$1.54 in April, 1934, the highest price for any month since July, 1927.)

Cols. 2 and 4: 1921-22 to 1929-30: Braun, E. W. Barley. Series on California Crops and Prices. Univ. Calif. Exp. Sta. Bul. 512. p. 28-29. April, 1931.

1930-31 to 1933-34: Broomhall's Corn Trade News.

Liverpool.

Col. 3: Broomhall's Corn Trade News, daily issues. Liverpool. Converted from English to American currency at average monthly rate quoted in Federal Reserve Bulletins.

TABLE 12

Barley Malt: United States Production, Consumption,
and Foreign Trade, 1925 to March, 1932

Calendar year	Production*	Exports*	Imports*	Indicated consumption [†]	Percentage supplied by imports
	1	2	3	4	5
	<u>1,000 bushels</u>	<u>1,000 bushels</u>	<u>1,000 bushels</u>	<u>1,000 bushels</u>	
1925	22,098	4,704	25	17,418	0.14
1927	21,592	2,869	24	18,746	0.13
1929	25,966	3,381	30	22,615	0.13
1930	18,694	2,085	127 [‡]	16,736	0.76
1931	16,246	692	1,173	16,726	7.01
1932 Jan.-Mar.	3,529	49	542	4,022	13.47
Average 1925-29	23,218	3,651	26	19,593	0.13
Average 1930-31	17,470	1,389	650	16,731	3.89

* Bushels of 34 pounds each.

[†] Production plus imports less exports.

[‡] Since July, 1930, imports from Canada have been about 98 per cent of total.

Source of data: U. S. Tariff Commission: Barley malt. Report No. 59, Second Series, p. 7. 1933. Based on Census of Manufactures, 1925-29, and shipments made by maltsters as reported to the Commission 1930-1932.

TABLE 13

United States: Production of Beer; Barley Malt Used for Beer
and for Distilled Spirits and Alcohol, 1921-22 to 1932-33

Year July-June	Production of beer	Estimate of barley malt used for beer	Barley malt used for distilled spirits and alcohol
	1	2	3
	<u>1,000 gallons*</u>	<u>1,000 bushels †</u>	<u>1,000 bushels †</u>
1921-22	196,788	5,579	680
1922-23	163,339	5,430	444
1923-24	151,621	4,771	1,060
1924-25	158,689	4,414	1,056
1925-26	159,536	5,222	641
1926-27	135,842	4,841	497
1927-28	129,022	4,423	385
1928-29	119,846	4,019	359
1929-30	114,111	3,914	647
1930-31	97,247	3,252	643
1931-32	85,746	2,834	506
1932-33	342,829	11,306	560
Average 1921-1929	146,630	4,735	641
Average 1930-1932	175,274	5,797	570

* Converted from barrels of 31 gallons.

† Bushels of 34 pounds.

Source of data: U. S. Tariff Commission: Barley Malt. Report No. 59, Second Series, p. 23. 1933. Compiled from U. S. Bureau of Industrial Alcohol, Statistics Concerning Intoxicating Liquors, annual reports.

TABLE 14

Production and Sales of Beer by California
Breweries, March, 1933 to May, 1934

Year	Beer pro- duction	Sales within state	Sales outside of state	Total sales
	1	2	3	4
	<u>1,000 gallons*</u>	<u>1,000 gallons</u>	<u>1,000 gallons</u>	<u>1,000 gallons</u>
1933 - March	906	-- †	-- †	-- †
April	1,913	2,514	-- †	2,514
May	3,397	2,717	162	2,879
June	4,058	2,857	338	3,195
July	5,501	3,215	468	3,683
August	5,053	3,621	702	4,323
September	3,818	3,245	594	3,839
October	3,332	3,480	398	3,878
November	3,890	3,025	273	3,298
December	3,799	2,656	506	3,162
1934 - January	3,856	2,665	468	3,133
February	4,268	3,004	565	3,569
March	6,094	4,733	662	5,395
April	7,097	4,747	-- †	4,747
May	7,998	-- †	-- †	-- †
Average Mar.-Dec., 1933	3,567	3,037 ^a	382 ^a	3,419 ^a
Average Jan.-May, 1934	5,863	3,787	424	4,211

* Converted from barrels of 31 gallons.

† None reported.

‡ Not available.

^a Average, Apr.-Dec., 1933.

|| Average, Jan.-Apr., 1934.

Sources of data:

Col. 1: United States Treasury Department, Bureau of Internal Revenue, Alcohol Tax Unit, San Francisco.

Cols. 2-4: Federal Reserve Bank of San Francisco, Department of the Federal Reserve Agent, Division of Analysis and Research.

TABLE 15

California: Numbers of Cattle and Hogs; Chick Sales, and Egg Shipments

Year	All cattle and calves*	Milk cows 2 years old and over	Milk heifers (1 - 2 years)	Cattle other than milk cows	Hogs	Egg shipments from California	Hatchery sales in California
	1 thousands	2 thousands	3 thousands	4 thousands	5 thousands	6 carlots	7 thousands of chicks
1925	1,990	595	140	1,255	532	1,195	--
1926	1,970	607	137	1,226	468	1,475	--
1927	2,029	613	143	1,273	585	1,787	6,808
1928	2,070	625	150	1,295	670	2,238	7,544
1929	2,049	637	155	1,257	650	2,000	9,177
1930	1,967	642	157	1,168	590	2,046	10,933
1931	2,006	637	154	1,215	560	1,796	9,025
1932	1,926	631	145	1,150	672	1,330	5,671†
1933	1,887	625	142	1,120	706	854	5,556‡
1934	1,850	619	138	1,093	635		
Average 1925-1929	2,022	616	145	1,261	581	1,739	7,843¶
Average 1930-1934	1,927	631	147	1,149	633	1,507	8,505¶
Jan.-May, 1933						315	3,942¶
Jan.-May, 1934						330	3,140¶

* Estimates of livestock on farms and ranges in California on January 1. Column 1 is the sum of cols. 2, 3, and 4.

† Only first nine months available.

‡ Under the National Recovery Administration code hatcheries plan to cease operations during July and August, 1934.

§ Agricultural Adjustment Administration corn-hog reduction program is likely to reduce inventory of hogs January 1, 1935 10 to 15 per cent below that of January 1, 1934.

¶ Three-year average.

|| January-April.

Sources of data:

Cols. 1, 2, 3, 4, and 5: California Cooperative Crop Reporting Service. Annual Livestock Summaries.

Col. 6: Voorhies, E. C., and J. B. Schneider. Egg Statistics Relating to the Southern Counties of California.

Calif. Agr. Exp. Sta. Giannini Foundation Memo. Report No. 33, p. 25. 1934; data from American Creamery and Poultry Produce Review weekly issues and Federal-State Market News Service, San Francisco.

Col. 7: 1927-1932: California Cooperative Crop Reporting Service, monthly reports.

1933-April, 1934: Federal-State Market News Service, San Francisco.

TABLE 16

Annual Average Wholesale Prices of Feed Barley and Competing Commodities
at San Francisco, Los Angeles, and Minneapolis, 1921-22 to 1933-34

(Dollars per hundred pounds)

Year	Feed barley			Feed wheat	Feed concentrates	No. 2 yellow corn	Sacked milo
	San Francisco June-May	Los Angeles June-May	Minneapolis July-June	San Francisco June-May	San Francisco April-March*	Los Angeles July-June	Los Angeles June-May
	1	2	3	4	5	6	7
1921-22	1.28	1.39	1.16	2.04	1.71	--	--
1922-23	1.43	1.51	1.21	1.97	2.02	1.83	--
1923-24	1.50	1.65	1.34	1.85	2.08	1.90	--
1924-25	2.13	2.22	1.76	2.73	2.30	2.44	--
1925-26	1.41	1.60	1.38	2.57	2.12	1.96	--
1926-27	1.32	1.43	1.48	2.26	1.90	1.90	--
1927-28	1.93	2.06	1.74	2.19	2.10	2.11	--
1928-29	1.61	1.74	1.37	2.13	2.13	2.11	1.93
1929-30	1.43	1.54	1.21	2.07	2.00	2.02	1.95
1930-31	1.05	1.19	0.98	1.42	1.58	1.66	1.56
1931-32	1.07	1.15	1.00	1.16	1.25	1.24	1.09
1932-33	0.63 [†]	0.74 [†]	0.68 [†]	1.02	1.00	0.93	0.92
1933-34	0.86 [†]	1.02 [†]	1.40 [†]	1.27	1.16	1.18	1.18

* Weights assigned to ingredients: Ground barley, 4; bran, 3; cottonseed, 2; linseed, 2; beet pulp, 2; rolled oats, 1; cracked corn, 1.

[†] Eleven months.

[‡] Ten months.

Sources of data:

Cols. 1 to 3: University of California, Agricultural Extension Service. Outlook charts and tables. Annual issues. Compiled from records of San Francisco Grain Trade Association.

Col. 4: June, 1921 - May, 1927: San Francisco Grain Exchange.

June, 1927 - May, 1934: Pacific Rural Press, weekly issues.

Col. 5: April, 1921 - March, 1931: Ground barley, bran, cottonseed, cracked corn, rolled oats. Pacific Rural Press weekly issues. Beet pulp, linseed: San Francisco Chronicle, daily.

April, 1931 - March, 1934: Bran, cottonseed, linseed: Federal-State Market News Service, San Francisco.

Others from Pacific Rural Press, weekly issues.

Col. 6: July, 1921 - February, 1928: California Cultivator, weekly issues.

March, 1928 - June, 1934: Los Angeles Grain Exchange, Daily Bulletin.

Col. 7: June, 1928 - May, 1934: Los Angeles Grain Exchange, Daily Bulletin.

TABLE 17

Ratios of Feed Barley Prices to Prices of Competing Feeds

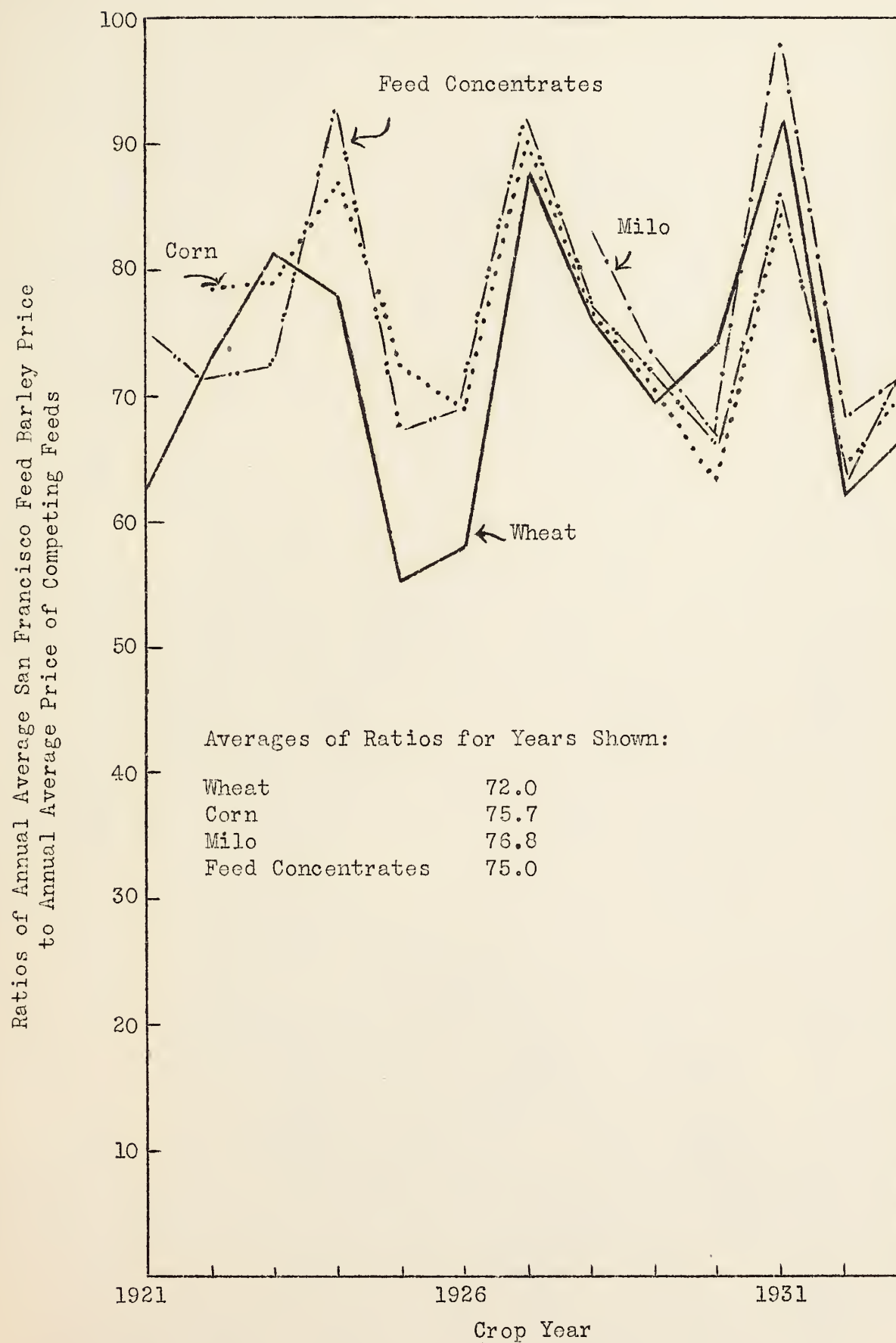
1921-22 to 1933-34

Crop year	Ratio of barley price to wheat price	Ratio of barley price to corn price	Ratio of barley price to sacked milo price	Ratio of barley price to feed concen- trates price
	1	2	3	4
	<u>per cent</u>	<u>per cent</u>	<u>per cent</u>	<u>per cent</u>
1921-22	63	--	--	75
1922-23	73	78	--	71
1923-24	81	79	--	72
1924-25	78	87	--	93
1925-26	55	72	--	67
1926-27	58	69	--	69
1927-28	88	91	--	92
1928-29	76	76	83	76
1929-30	69	71	73	72
1930-31	74	63	67	66
1931-32	92	86	98	86
1932-33	62	64	68	63
1933-34	67	72	72	73
Average 1921-1933	72.0	75.7*	76.8*	75.0

* Average for years shown.

Source of data: Computed from data in table 16, using San Francisco feed barley prices. Crop years are not identical in all cases.

Ratios of Feed Barley Prices to Prices of Competing Feeds
1921-22 to 1933-34



Source of data: Table 17.

